

BRIDGE ACROSS YOUNG'S BAY, OREGON.

APRIL 6, 1886.—Referred to the House Calendar and ordered to be printed.

Mr. BYNUM, from the Committee on Commerce, submitted the following

REPORT:

[To accompany bill H. R. 4670.]

The Committee on Commerce, to whom was referred the bill (H. R. 4670) to authorize the county of Clatsop, in the State of Oregon, to construct a bridge across Young's Bay, in said county and State, respectfully report as follows:

Young's Bay separates the main agricultural section of Clatsop County from the county seat and only town. The people in that section of the county now have a county road running to the bay, and from the opposite side to Astoria, the county seat, and it is not only desirable, but important, that the county should have the right to construct the bridge as provided in the bill. The propriety of authorizing the construction of the bridge was submitted to the Secretary of War, and his answer, together with a communication from the Chief of Engineers inclosing copy of communication from Capt. Charles F. Powell, Corps of Engineers, are filed herewith, and made a part hereof.

In view of the recommendations contained in the report of Captain Powell, your committee recommend that the bill be amended as follows:

Strike out all that portion of line 8 in section 1 beginning with the words "draws and other," and lines 9, 10, and 11, and insert in the stead thereof the following:

"With such channel spans, draws, safeguards, and auxiliary works as shall cause the bridge not unduly to obstruct or injure the navigation of the waters crossed by it, and that said channel spans and structures shall be as the Secretary of War may prescribe: *Provided, also,* That said draws shall be opened promptly upon reasonable signal for the passage of ships and boats, and in no case shall unnecessary delay occur; and said county shall maintain at its own expense, from sunset to sunrise, such lights or other signals in said bridge as the Light-House Board shall prescribe."

Strike out the word "postal," in line 11 of section 2.

Strike out all of section 2 beginning with the words "the location," in line 18, and insert in the stead thereof the following:

"Young's Bay from the mouths of its navigable tributaries to the adjacent ship channel, which map shall be of a scale of at least 1-20,000, and whose topography of the shores and hydrography shall reasonably represent the banks, the bottom, and steamboat channels by contours of 6 feet, and which shall be accompanied by other maps drawn to a scale

of 1 inch to 200 feet, giving within areas of one-quarter of a mile from each drawn span an accurate representation of the bottom of the bay by contour lines 2 feet apart, determined by accurate soundings, and also showing the force and direction of the currents at each 2 feet of tidal stage by triangulated observations in suitable floats; the maps shall also show the locations of other bridges in the vicinity, and shall give such other information as the Secretary of War may require for a full and satisfactory understanding of the subject."

Also add the following as section 3:

SEC. 3. "That Congress shall have power at any time to alter or amend this act so as to prevent or remove all material and substantial obstructions to the navigation of said bay by the construction of said bridge and its accessory works, and the expense of altering said bridge or removing such obstructions shall be borne by the owner of said bridge."

WAR DEPARTMENT,
Washington City, March 9, 1886.

SIR: In reply to the letter of the 6th ultimo, from your committee, by its clerk, requesting information and such suggestions as may be deemed proper upon House bill 4670, Forty-ninth Congress, first session, authorizing the construction of a bridge across Young's Bay, in Clatsop County, Oregon, I have the honor to inclose herewith a communication of the 5th instant, from the Chief of Engineer's, with its accompanying copy of a report of the 22d ultimo, from Capt. Charles F. Powell, Corps of Engineer's, containing recommendations with regard to the location and erection of the bridge in question, and suggesting that a new section be inserted in the bill requiring the county authorized to construct the bridge to first submit to the Secretary of War, for his examination, a map of Youngs' Bay and its surroundings.

The views of Captain Powell are concurred in by the Chief of Engineers and by this Department. The bill inclosed in your letter is herewith returned.

Very respectfully, your obedient servant,

WM. C. ENDICOTT,
Secretary of War.

HON. JOHN H. REAGAN,
Chairman Committee on Commerce, House of Representatives.

OFFICE OF THE CHIEF OF ENGINEERS, UNITED STATES ARMY,
Washington, D. C., March 5, 1886.

SIR: I have the honor to acknowledge the receipt, by reference to this office, of H. R. 4670, a bill "granting to the County of Clatsop, in the State of Oregon, the right to construct a bridge across Young's Bay, a navigable stream in said county and State," submitted to the War Department from the Committee on Commerce of the House of Representatives, and to invite attention to the accompanying copy of the report thereon of Capt. Charles F. Powell, Corps of Engineers, to whom it was referred, dated February 22, 1886.

Captain Powell has given the subject intelligent and careful consideration, and his views are concurred in by this office.

The bill H. R. 4670 is herewith respectfully returned.

Very respectfully, your obedient servant,

JOHN NEWTON,
Chief of Engineers, Brig. and Bvt. Maj. Gen.

HON. WILLIAM C. ENDICOTT,
Secretary of War.

Report on H. R. bill 4670, Forty-ninth Congress, first session, authorizing Clatsop County to bridge Young's Bay, Oregon.

Young's Bay is an arm of the Columbia River near its mouth. Young's River, Lewis and Clark's River, and Skipanon Creek, all navigated streams, empty into the bay.

The navigation routes of the streams named center at Astoria, which lies up-stream from Young's Bay. The ship channel from the sea to Astoria runs close to Young's

Bay and connects Astoria Harbor with the bay. The proposed bridge would consequently separate the streams named from the ship channel and from Astoria.

The bay is subject to high winds and tidal currents, and the channels across it from the tributaries named are tortuous. Neither it nor any of the tributaries below navigation has yet been bridged. The Astoria chamber of commerce memorialized Congress a few years since for improvement of the tributaries. A survey was made of them in 1881, a report of which appears on pages 2714 to 2716, annual report Chief Engineer, 1882.

A high bridge is hardly practicable. The kind of construction desired will probably be that of pile bents. Draws at two and perhaps three places will be needed, as also carefully devised safeguards, for vessel passage of the draws and auxiliary works for security of the channels. Every draw should have protection piers above and below the pivot pier, and suitable filling between; some circumstances require guiding dikes or sheer booms; others, works to make permanent an otherwise shifting channel.

It does not appear to me that these structures are explicitly provided for in the bill. I therefore suggest that line eight and following lines of the first section read "with such channel spans, draws, safeguards and auxiliary, works as shall cause the bridge not unduly to obstruct or injure the navigation of the waters crossed by it, and that said channel spans and structures shall be as the Secretary of War may prescribe;" and that Congress reserve the right to order, at the expense of the owners, changes in or additions to the bridge or its accessory structures required to preserve the free and convenient navigation of Young's Bay, unless such right would certainly exist without stated provision therefor in the bill.

A military telegraph line from Astoria to the coast crosses at or near Young's Bay. Right of way at the bridge might be desired for the line. This can be secured without taking anything from the sense of the present bill by omitting the word postal in line 11, section 2.

I further suggest that the making and enforcing of regulations about opening the draws should be vested in some authority, as the Secretary of War or State legislature; and that the signal lights on the bridge should be required, and be subject to regulations and control of the Light-House Board in order that the system of such lights at different localities may be constant and uniform.

For a full understanding of the bridge location I judge the map should include all of the bay in front of the mouths of navigated tributaries, whether 1 mile or more from the proposed location, and that other information besides that shown on the map may be desired; data about currents at all stages is not necessary; an exhibit of currents at stages of ebb and flood differing by 2 feet will be sufficient. I therefore suggest that the following be substituted for the requirement in the bill for a map of the bridge location: "And a map of Young's Bay from the mouths of its navigated tributaries to the adjacent ship channel, which map shall be of a scale of at least 1:2000, and whose topography of the shores and hydrography shall reasonably represent the banks, the bottom, and steamboat channels by contours of 6 feet, and which shall be accompanied by other maps drawn to a scale of 1 inch to 200 feet, giving within areas of one-quarter of a mile from each draw span an accurate representation of the bottom of the bay by contour lines 2 feet apart, determined by accurate soundings, and also showing the force and direction of the currents at each 2 feet of tidal stage by triangulated observations on suitable floats; the maps shall also show the locations of other bridges in the vicinity, and shall give such other information as the Secretary of War may require for a full and satisfactory understanding of the subject."

Respectfully submitted.

CHAS. F. POWELL,
Captain of Engineers.

UNITED STATES ENGINEER OFFICE,
Portland, Oregon, February 22, 1886.

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